

REMARKS

This Amendment is responsive to the final Office Action dated September 8, 2004, and is being submitted with a request for continued examination (RCE) filing. This Amendment constitutes the required submission for the RCE, and replaces the non-entered Amendment that Applicant filed on November 8, 2000. Applicant has canceled claims 33, 36 and 37, and amended claims 1 and 38 for reasons unrelated to patentability. Applicant has also added new claim 46. Claims 1, 3-4, 6-10, 13-18, 21-28, 31-32, 38, and 41-46 are pending.

In the final Office Action, the Examiner rejected claims 1, 3-4, 6-18, 22-28, 31-32, 38, and 41-43 under 35 U.S.C. 103(a) as being unpatentable over Deguchi et al. (US 6,480,202) in view of Liang (US 5,579,031).

The Examiner objected to claims 21, 44, and 45 as including subject matter that would be allowable if rewritten in independent form.

As outlined previously in Applicant's last response, the applied references do not disclose or suggest a display including a housing and a processor that adjusts color images, the processor being housed within the housing of the display. All pending independent claims (1, 22 and 38) require a processor that adjusts color images, the processor being housed within a housing of a display. This feature is clearly lacking from the applied references.

In particular, claim 1 recites a display device comprising a display that presents a color images, the display including a housing, and a processor within the housing of the display that adjusts the color images presented by the display, wherein the processor receives color input including input color image data, processes the color input based on a source device profile associated with a source imaging device and a display profile associated with the display to generate altered color image data, and outputs the altered color image data to the display to present the color image. Claim 22 recites a method comprising receiving color input in a display device, processing the color input in a processor internally housed within a housing of the display device to generate altered image data, and displaying a color image according to the altered image data.

Claim 38 recites a system comprising a plurality of display devices, each display device including a display defining a housing and a color matching processor internally housed within

the housing of each display, a color management control coupled to the display devices, and at least one printing device coupled to the color management control.

In the final Office Action, the Examiner appears to have once again recognized that the applied references fail to disclose or suggest a color matching processor housed within a display, as recited in Applicant's independent claims 1, 22 and 38. In particular, the Examiner specifically states that a difference between the disclosure of Deguchi and the claimed invention is that claim 1 requires that the processor is within the housing of the display. However, the Examiner cited the cases of *In re Larson*, 144 USPQ 347 (CCPA 1965) and *In re Lockhart*, 90 USPQ 214 (CCPA 1951) as recognizing that "whether the processor and the display are used separately or in combination, it would perform the same function."

The Examiner's reliance on the *In re Larson* and *In re Lockhart* is entirely misplaced. Of course, these cases did not literally address the patentability of inventions relating to the use of a display and processor, as suggested by the Examiner's remarks. As best as Applicant can discern, it appears that the Examiner cited these cases for the proposition that the combination of independent devices to form a common device is obvious. Unfortunately, the Examiner's reliance on such ancient case law, decided long before the creation of the Court of Appeals for the Federal Circuit, side-steps the legal requirements that the Examiner must apply in establishing a prima facie case of obviousness.

To establish the obviousness of a combination, it is not sufficient that two combined devices merely exist independently in the prior art. On the contrary, there must be some teaching in the prior art that would have suggested to a person of ordinary skill in the art the desirability of such a combination. See *In re Gordon*, 221 USPQ 1125 (Fed. Cir 1984), *Northern Telecom, Inc. v. Datapoint Corp.*, 15 USPQ2d 1321 (Fed. Cir. 1990), *In re Oetiker*, 24 USPQ2d 1443 (Fed. Cir 1992), and *In re Kotzab*, 54 USPQ2d 1308 (Fed. Cir. 2000). In this long line of Federal Circuit cases, the Court has consistently held that it is insufficient that the prior art disclosed the components of the patented device, either separately or used in other combinations. *Id.* Instead, for determinations of obviousness, the Court consistently requires that there must be some teaching, suggestions, or incentive to make the combination made by the inventor. *Id.* Accordingly, without identifying any such motivation in the prior art, the Examiner clearly has failed to carry the PTO's burden in establishing a prima facie case of obviousness.

To the extent *In re Larson* and *In re Lockhart* provide any relevant law, these cases cannot abrogate the requirements mandated by more recent Federal Circuit law, that the Examiner must identify a motivation in the prior art that would have led one of ordinary skill to undertake the requisite modification. Whether devices would perform a similar function when combined or used independently is simply a consequence of modification and bears no relevance whatsoever to the question of whether that modification would have been obvious to one of ordinary skill in the art.

Indeed, in *Schenck v. Nortron Corp.*, 218 USPQ 698 (Fed. Cir. 1983), the Court of Appeals for the Federal Circuit did not rush to a conclusion of obviousness when it was argued that the claimed invention was merely making integral what was previously a combination of components. Rather, the Court considered whether the pertinent prior art would have suggested such integration. Notably, the MPEP cites the *Schenck* case with the *In re Larson* case, noting the distinction made by the Court in *Schenck*. See MPEP 2144.04.

The case of *In re Larson* concerned a fluid carrier for a vehicle brake assembly. The case of *In re Lockhart* concerned a hypodermic syringe. Hence, the cases of *In re Larson* and *In re Lockhart* related to mechanical inventions. In those cases, the Court held that making certain components structurally “integral,” where such components were before separate elements, did not amount to a patentable improvement. Notably, however, the Court even recognized that: “it is true that invention may be present under some circumstances in making integral that which was separate before” See *In re Lockhart* at page 216.

As one clear distinction over the facts of *In re Larson* and *In re Lockhart*, in the instant case, Applicant’s claimed invention does not amount to making mechanical components “integral,” which were before separate elements. In fact, the term “integral” does not appear in any of Applicant’s claims. Instead, Applicant’s invention structurally defines a novel location of a color matching processor, i.e., housed within the housing of a display. In this manner, the claimed invention provides the combination of a color matching processor within the housing of a display device such that the display device actually includes its own color matching processor, in contrast to the prior art in the area of color matching. Moreover, Applicant’s specification recognizes specific advantages of the claimed invention that are unrecognized in any of the applied prior art. Accordingly, without access to Applicant’s own disclosure, it is unclear how

one of ordinary skill in the art would have been cognizant of the desirability of modification to arrive at the claimed invention.

In view of the legal requirements necessary to establish a prima facie case of obviousness, the Examiner's reliance on cases that focus on mechanical integration of components is misplaced. A color matching processor housed within a display is neither disclosed nor suggested in any of the references cited by the Examiner. The cited case law cannot fill the void between the claimed invention and the prior art of record. Of course, neither *In re Larson* nor *In re Lockhart* says anything regarding a color matching processor housed within a display. Accordingly, the Examiner's statement that *In re Larson* and *In re Lockhart* recognize that "whether the processor and the display are used separately or in combination, it would perform the same function" is absurd and unsupported by the facts of those cases. The Examiner seems to be improperly applying the case law to address factual issues of obviousness regarding the functionality of a processor and a display, which is clearly improper.

Moreover, neither the cases cited by the Examiner nor the prior art of record suggests any of the advantages that can be achieved by the claimed invention, which are lacking from the prior art. For example, Applicant's disclosure recognizes that the color matching processor housed within the display can eliminate the need for the RGB conversions, e.g., RGB to sRGB and sRGB to RGB, ordinarily required within a host computer that drives a display device. See page 6, lines 22-24 of Applicant's specification. Also, with the processor housed within the display, the processor may also be configured to perform functions above and beyond those performed by the external color matching modules (CMMs) that typically execute on a host computer. See page 6, lines 25-27 of Applicant's specification.

Neither Deguchi nor Liang discloses or suggests a processor housed within a display, much less a processor, housed within the display, that adjusts color images. In Deguchi, a color management system (CMS) is described, which specifically addresses the effects of ambient light on display devices. However, nothing in Deguchi suggests that the processing steps performed by the CMS could take place in an internal processor housed within the display, nor recognizes the advantages that can be achieved by use of display with its own internal processor.

Likewise, Liang also lacks any teaching that would have led a person of ordinary skill in the art to modify the Deguchi system to provide a color matching processor housed within a

display. As interpreted by the Examiner, in Liang, color processing takes place in a workstation. However, in Liang, it appears that color correction is performed by an adaptor 22 not workstation 10. In any event, the workstation in Liang is totally separate from the display, so whether color correction occurs in work station 10 or adaptor 22, it is clear Liang does not disclose a processor within the housing of a display that performs color correction. In short, neither Deguchi nor Liang discloses or suggests a processor housed within a display, much less a processor that adjusts color images, the processor being housed within the display.

Applicant's disclosure provides the only teaching of record that describes a processor, housed within a display, that adjusts color images presented by the display. Moreover, Applicant's disclosure also provides the only teaching of record that recognizes the advantages that can be achieved through use of processor housed within a display. Accordingly, without access to Applicant's disclosure, one of ordinary skill in the art would have had no appreciation of such advantages, and hence no motivation to provide a color processor within the housing of a display.

New claim 46

New claim 46 has been added, which finds support in FIG. 2 and the corresponding discussion of Applicant's specification. In particular, new claim 46 recites a system that comprises a display device, as substantially recited in claim 1. For this reason, Applicant believes that claim 46 is patentable for the reasons outlined above with respect to claim 1.

In addition, claim 46 further distinguishes the applied references insofar as it further recites a second processor, which comprises a general purpose microprocessor that provides the input color image data to the first processor housed within the display. As shown in FIG. 2, the first processor, display processor 31, is housed within display device 23, while a second processor 21, which comprises a general purpose microprocessor, provides the input image data to the first processor.

The Examiner's comments in the Advisory Action

In an Advisory Action submitted by the Examiner in response to the amendment of Nov. 8, 2004 (which this Amendment replaces), the Examiner stated the following:

Liang (5,579,031) discloses the processor is housed within a color matching hardware unit (workstation 10), which itself comprises a display device (column 5, lines 3-9). Furthermore whether making a unit integral or separable is found to be unpatentable (*In re Lockhart*).

In response to these comments, Applicant again urges the Examiner to review Applicant's remarks above. A processor within a housing of a work station 10, as shown in Liang, is different than a processor housed within a display housing. Specifically, in Liang, the display housing is a separate housing from the base portion of work station 10. Moreover, Liang does not disclose or suggest a processor within the housing of the display; rather, the processor in Liang is within the base portion of work station not the display housing.

Moreover, in Liang, it appears that color correction is performed by an adaptor 22. Thus, any processor that performs color correction is not even housed within work station 10, much less within the housing of a display device associated with work station 10. Therefore, nothing in Liang is even remotely suggestive of the features of Applicant's claims that require a processor within the housing of a display receives color input including input color image data, processes the color input based on a source device profile associated with a source imaging device and a display profile associated with the display to generate altered color image data, and outputs the altered color image data to the display to present the color image.

With regard to the Examiner's continued reliance on *In re Lockhart* in the Advisory Action, Applicant again points out that this case law cannot abrogate the requirements mandated by more recent Federal Circuit law, that the Examiner must identify a motivation in the prior art that would have led one of ordinary skill to undertake the requisite modification. Moreover, contrary to the Examiners statements, Applicant's claimed invention does not amount to making mechanical components "integral," which were before separate elements. As outlined above, the term "integral" does not appear in any of Applicant's claims. Instead, Applicant's invention structurally defines a novel location of a color matching processor, i.e., housed within the housing of a display. In this manner, the claimed invention provides the novel combination of a color matching processor within the housing of a display device such that the display device actually includes its own color matching processor, in direct contrast to the prior art in the area of color matching. Moreover, Applicant's specification recognizes specific advantages of the

claimed invention that are unrecognized in any of the applied prior art. Accordingly, without access to Applicant's own disclosure, it is unclear how one of ordinary skill in the art would have been cognizant of the desirability of modification to arrive at the claimed invention.

In view of the legal requirements necessary to establish a prima facie case of obviousness, the Examiner's continued reliance *In re Lockhart* is clearly improper. A color matching processor housed within a display is neither disclosed nor suggested in any of the references cited by the Examiner. *In re Lockhart* cannot fill the void between the claimed invention and the prior art of record.

CONCLUSION

All claims in this application are in condition for allowance. In order to simplify the issues presented in this after final response, Applicant has specifically focused the above discussion to one specific feature of the independent claims and the case law, which was improperly interpreted and improperly applied by the Examiner. In particular, Applicant respectfully submits that the Examiner has misinterpreted the case law cited in the final Office Action and clearly applied the incorrect rule of law in the current case. In any case, Applicant does not acquiesce to any of the Examiner's characterizations of the prior art.


Applicant respectfully requests reconsideration and prompt allowance of all pending claims. Please charge any additional fees or credit any overpayment to deposit account number 50-1778. The Examiner is invited to telephone the below-signed attorney to discuss this application.

Date:

Jan. 10, 2005

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